

Improve the Quality of Cancer Care

We will support the development and dissemination of quality improvement interventions and measure their success in improving health-related outcomes across the cancer continuum.

As interventions and technologies become more sophisticated, the cancer community must build upon research evidence to continually enhance the quality, safety, and appropriateness of care—including prevention, screening and follow-up, staging and accurate diagnosis, treatment and adjuvant therapy, and systematic follow-up to both prevent and detect recurrence and second cancers. It is also critical to prevent or identify and treat the chronic and other late effects of cancer and its treatment. This will be accomplished through the efforts of public health programs, primary care practitioners, oncologists, and others who care for cancer patients, survivors, and their families.

Desired health outcomes include survival and health-related quality of life. For cancer, high quality care means delivering the full range of evidence-based interventions that are safe, patient-centered, effective (i.e., likely to provide more benefit than harm), timely, efficient, and equitable. Such care must be provided with technical competence and cultural sensitivity and must foster patient choice based on informed decision making.

Research on quality of cancer care includes surveillance, epidemiologic, and cost-effectiveness studies. It includes examining patterns and variation in care among diverse patient populations and provider groups. Quality of care studies also encompass the development of ways to measure how well standards of care are applied in practice and the outcomes of that care. Outcomes include observable intermediate endpoints (tumor shrinkage, for example) and survival as well as outcomes reported by patients and/or caregivers. Stronger scientific evidence for public and private decision making related to care delivery, coverage, purchasing, regulation, and standard setting will enhance the efficiency and quality of cancer care services.

STRATEGY 6.1—Foster the use of research evidence about patterns of care and care outcomes to develop quality improvement interventions.

Improving care first requires measuring and understanding patterns of care and then building on that understanding to ensure that the best information is used to reduce unwanted variations in care or poor outcomes and enhance the quality and safety of cancer care. NCI will:

- > Examine how care varies by age, race, ethnicity, and socioeconomic status as well as the types and causes of adverse health-related quality of life outcomes.
- > Identify clinical and organizational factors that affect whether quality improvements are effective, sustainable, and applicable to different care settings.
- > Identify quality improvements likely to have the greatest impact on desired outcomes and partner with other Federal organizations and the private sector to implement them.
- > Identify ways to tailor therapies and their delivery to maximize outcomes while minimizing adverse effects and to improve treatment follow-up.
- > Promote the use of validated care standards and quality measures that enable healthcare providers to better monitor patient care, make treatment decisions, and manage symptoms.



Electronic Health Records Are Essential for Cancer Patient Care

Integrated electronic health records (EHRs) promise to help healthcare providers and their patients achieve quality and continuity in treatment. Cancer patients receive multimodality therapies that require greater access to and tracking of detailed medical data. Clinical trials, which demand intense documentation, must show cost-effectiveness and patient satisfaction in addition to progression-free and overall survival benefits. Today, oncologists are embracing the medical tools of the Information Age, including the electronic medical record, which is the translator and repository of our clinical information gathering.

As oncologists become more focused on cancer screening and prevention and as clinical trials data management becomes automated, the electronic medical record will become indispensable. We will see collaborative online efforts to develop clinical pathways and multidisciplinary plans of care that standardize patient treatment and decision support. All of this will make more evidence-based medicine possible by bringing current scientific knowledge to the oncologist for point-of-care decision making.

STRATEGY 6.2—Implement advanced information systems and interoperable electronic health records to inform future research and guide clinical practice.

The cancer research enterprise provides a logical venue for developing advanced medical informatics and health information systems that can revolutionize both cancer research and cancer care. New approaches will improve the coordination, integration, and timeliness of care decisions for cancer patients. Electronic health records will enable healthcare providers and clinical trial investigators to make more efficient, informed, and personalized decisions about care and complete the cycle of science from the bedside back to the bench. NCI will:

> Develop a medical informatics infrastructure to link to national epidemiologic databases and to coordinate communication among the multiple participants in cancer care, including primary care practitioners.

- > Work with others to implement state-of-the-art information systems to quickly access relevant patient health information for use in research and practice.
- > Collaborate with other agencies to ensure that patient medical information is used only in ways that improve care delivery while protecting patient privacy.

STRATEGY 6.3— Translate symptom management and palliative care research into interventions to improve care for patients and survivors and at the end of life.

A substantial number of patients experience cancerand treatment-related physical and psychosocial impairments. Pain, depression, and fatigue, alone or in combination, are the most frequently cited symptoms. NCI will:

- > Encourage research collaborations across disciplines and care delivery systems to investigate biological mechanisms of cancer- and treatment-related symptoms and impairments.
- > Translate research on the biological mechanisms of symptoms to develop more targeted interventions for preventing and treating symptoms that occur at any point along the cancer continuum.
- > Expand on new understandings of evidence-based symptom management and palliative care to deliver care to vulnerable, medically underserved, and special populations.
- > Provide training to care providers on integrating the latest evidence-based symptom management and palliative care interventions into clinical practice.

"Palliative care"—also called comfort care, supportive care, or symptom management—is care given to improve the quality of life of patients who have a serious or life-threatening disease.

Once largely confined to providing comfort to the dying, the field of palliative care has broadened to include the prevention or treatment as early as possible of the symptoms of the disease and the side effects caused by treatment of the disease—including the physical, social, psychological, and spiritual aspects of coping with cancer—over the entire continuum of care.

STRATEGY 6.4—Ensure that the best scientific evidence about quality measures and assessment informs Federal, state, and private sector decision making about cancer care.

As our understanding of what constitutes quality cancer care increases, this knowledge must be used to inform policy making and program development. NCI will:

- > Work to improve evidence-based cancer care delivery by strengthening the scientific evidence for public and private decision making on care delivery, coverage, purchasing, regulation, and standard setting.
- > Work with the Agency for Healthcare Research and Quality, the Centers for Medicare and Medicaid Services, the Centers for Disease Control and Prevention, and other organizations to identify a core set of cancer quality measures for public reporting, quality improvement, and surveillance that tracks the burden of cancer and the quality of care over time.
- > Participate in public and private sector efforts and work with accrediting organizations, professional societies, and healthcare organizations to foster the adoption of evidence-based interventions.

STRATEGY 6.5—Ensure that relevant audiences receive new information about cancer prevention, treatment, and follow-up.

Healthcare providers; people at high risk for cancer; and people who receive a cancer diagnosis, their families, and caregivers all need appropriate and timely information to make informed decisions about prevention, treatment, follow-up, and end-of-life care. As we gain new knowledge about cancer risk and develop evidence-based prevention and treatment interventions, NCI will work to ensure that this information reaches and is used by providers and patients. We will:

- > Work in strategic partnerships with advocacy organizations, professional societies, other Federal agencies, the oncology community, and health plans to disseminate research findings and address barriers to their adoption.
- > Use diverse media platforms and both contemporary and traditional communication methods that respond to patient needs and support informed decision making at all levels.



STRATEGY 6.6— Strengthen the methodological basis for evaluating quality improvement efforts.

Developing methods to assess the value, replicability, or adaptation of cancer care quality improvement interventions is a prerequisite to improving clinical care processes. NCI will:

- > Assess the effectiveness of existing and new quality of care interventions to inform future efforts.
- > Assess the delivery and impact of patient-centered communication across the cancer care continuum. We will employ innovative measurement approaches and study designs to help monitor and track the success of communication efforts over the course of the patient, family, and healthcare provider experience.
- > Assess the effectiveness of specific information technologies in improving quality of care.